CLAIMS

We claim:

    1. A computer implemented method for automated processing of applications by a business applications server comprising the acts of:

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- receiving a communication from a first server;
- translating a content of the communication into a format for processing by the business applications server;
- using a set of metadata to define properties and behavior of the translated
10   content of the communication; and
- processing the translated content of the communication using a code path defined by a persistence framework.

    2. The computer implemented method of claim 1 wherein the
15 communication from a first server is in a SabaObject Applications Programming Interface (API) format.

    3. The computer implemented method of claim 1 wherein the communication from a first server is in a SabaEntityBean API format

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    4. The computer implemented method of claim 1 wherein the communication from a first server is in a SabaSessionBean API format.

    5. The computer implemented method of claim 1 wherein the
25 communication from a first server is in an XML format designated a Saba Canonical Format.

    6. The computer implemented method of claim 1 wherein the communication from a first server is in an IXMLObject API format.

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7. The computer implemented method of claim 1 wherein the processing by the business applications server is driven by a persistence framework for saving and restoring state of business objects.

8. The computer implemented method of claim 7 wherein the processing by the business applications server is driven by a set of core services for performing operations on business objects.

9. The computer implemented method of claim 8 wherein the set of core services for performing operations on business objects comprises security services to control user access to such operations on business objects.

10. The computer implemented method of claim 8 wherein the set of core services for performing operations on business objects comprises event monitoring and notification services.

11. The computer implemented method of claim 8 wherein the set of core services for performing operations on business objects comprises mechanisms for enabling and disabling business rules that affect workflow and behavior of business objects.

12. The computer implemented method of claim 1 wherein the set of metadata defines class properties and behavior for each class of business object and wherein the metadata are stored as distinct, editable information.

13. The computer implemented method of claim 12 wherein the class properties and behavior for each class of business object which can be dynamically modified comprise labels used to display object information, type of data validation to be performed and amount of custom information associated with a given object.

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14. The computer implemented method of claim 1 wherein the code path defined by the persistence framework comprises code to create new objects, restore and update existing objects, delete objects and find objects.

5   15. The computer implemented method of claim 1 wherein the code path defined by the persistence framework comprises a set of Java code and database stored procedures to construct and verify object data.

16. The computer implemented method of claim 15 wherein the code path
10   defined by the persistence framework further comprises SQL commands to save and restore information using a relational database.

17. An apparatus for implementing a business application comprising:

- a business application server adapted to receive an electronic
15   communication from a first server;
- a translator coupled to the business application server to convert a content of the communication into a format for processing by the business applications server;
- a first processor mechanism in the business applications server to use a
20   set of metadata to define properties and behavior of the converted content of the communication; and
- a second processor mechanism in the business applications server to process the converted content of the communication using a code path defined by a persistence framework.

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18. The apparatus of claim 17 wherein the communication from a first server is in a SabaObject Applications Programming Interface (API) format.

19. The apparatus of claim 17 wherein the communication from a first
30   server is in a SabaEntityBean API format

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20. The apparatus of claim 17 wherein the communication from a first server is in a SabaSessionBean API format.

21. The apparatus of claim 17 wherein the communication from a first server is in an XML format designated a Saba Canonical Format.

22. The apparatus of claim 17 wherein the communication from a first server is in an IXMLObject API format.

23. The apparatus of claim 17 wherein the processing by the business applications server is driven by a persistence framework for saving and restoring state of business objects.

24. The apparatus of claim 23 wherein the processing by the business applications server is driven by a set of core services for performing operations on business objects.

25. The apparatus of claim 24 wherein the set of core services for performing operations on business objects comprises security services to control user access to such operations on business objects.

26. The apparatus of claim 24 wherein the set of core services for performing operations on business objects comprises event monitoring and notification services.

27. The apparatus of claim 24 wherein the set of core services for performing operations on business objects comprises mechanisms for enabling and disabling business rules that affect workflow and behavior of business objects.

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28. The apparatus of claim 17 wherein the set of metadata defines class properties and behavior for each class of business object and wherein the metadata are stored as distinct, editable information.

5   29. The apparatus of claim 28 wherein the class properties and behavior for each class of business object which can be dynamically modified comprise labels used to display object information, type of data validation to be performed and amount of custom information associated with a given object.

10   30. The apparatus of claim 17 wherein the code path defined by the persistence framework comprises code to create new objects, restore and update existing objects, delete objects and find objects.

          31. The apparatus of claim 17 wherein the code path defined by the
15   persistence framework comprises a set of Java code and database stored procedures to construct and verify object data.

          32. The apparatus of claim 17 wherein the code path defined by the persistence framework further comprises SQL commands to save and restore
20   information using a relational database.

          33. A computer program product stored on a computed readable medium, comprising;

- a first computer readable program mechanism for receiving a
25   communication from a first server;

- a second computer readable program mechanism for translating a content of the communication into a format for processing by a business applications server;

- a third computer readable code mechanism for using a set of metadata to
30   define properties and behavior of the translated content of the communication; and

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• a fourth computer readable code mechanism for processing the translated content of the communication using a code path defined by a persistence framework.

34. The computer program product of claim 33 wherein the communication from a first server is in a SabaObject Applications Programming Interface (API) format.

35. The computer program product of claim 33 wherein the communication from a first server is in a SabaEntityBean API format

36. The computer program product of claim 33 wherein the communication from a first server is in a SabaSessionBean API format.

37. The computer program product of claim 33 wherein the communication from a first server is in an XML format designated a Saba Canonical Format.

38. The computer program product of claim 33 wherein the communication from a first server is in an IXMLObject API format.

39. The computer program product of claim 33 wherein the processing by the business applications server is driven by a persistence framework for saving and restoring state of business objects.

40. The computer program product of claim 39 wherein the processing by the business applications server is driven by a set of core services for performing operations on business objects.

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41. The computer program product of claim 40 wherein the set of core services for performing operations on business objects comprises security services to control user access to such operations on business objects.

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42. The computer program product of claim 40 wherein the set of core services for performing operations on business objects comprises event monitoring and notification services.

43. The computer program product of claim 40 wherein the set of core

10 services for performing operations on business objects comprises mechanisms for enabling and disabling business rules that affect workflow and behavior of business objects.

44. The computer program product of claim 33 wherein the set of

15 metadata defines class properties and behavior for each class of business object and wherein the metadata are stored as distinct, editable information.

45. The computer program product of claim 44 wherein the class properties and behavior for each class of business object which can be

20 dynamically modified comprise labels used to display object information, type of data validation to be performed and amount of custom information associated with a given object.

46. The computer program product of claim 33 wherein the code path

25 defined by the persistence framework comprises code to create new objects, restore and update existing objects, delete objects and find objects.

47. The computer program product of claim 33 wherein the code path defined by the persistence framework comprises a set of Java code and database

30 stored procedures to construct and verify object data.

48. The computer program product of claim 47 wherein the code path defined by the persistence framework further comprises SQL commands to save and restore information using a relational database.

5   49. A computer implemented method for automated processing of applications by a business applications server comprising the acts of:

- receiving a communication from a first server;
- translating a content of the communication into a format for processing by
10   the business applications server;
- using a set of metadata to define properties and behavior of the translated content of the communication; and
- processing the translated content of the communication using a code path defined by a persistence framework, wherein persistence code is itself part
15   of the set of metadata.

       50. The computer implemented method of claim 49 wherein the persistence code which is itself part of the set of metadata comprises SQL commands for save and restore.

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